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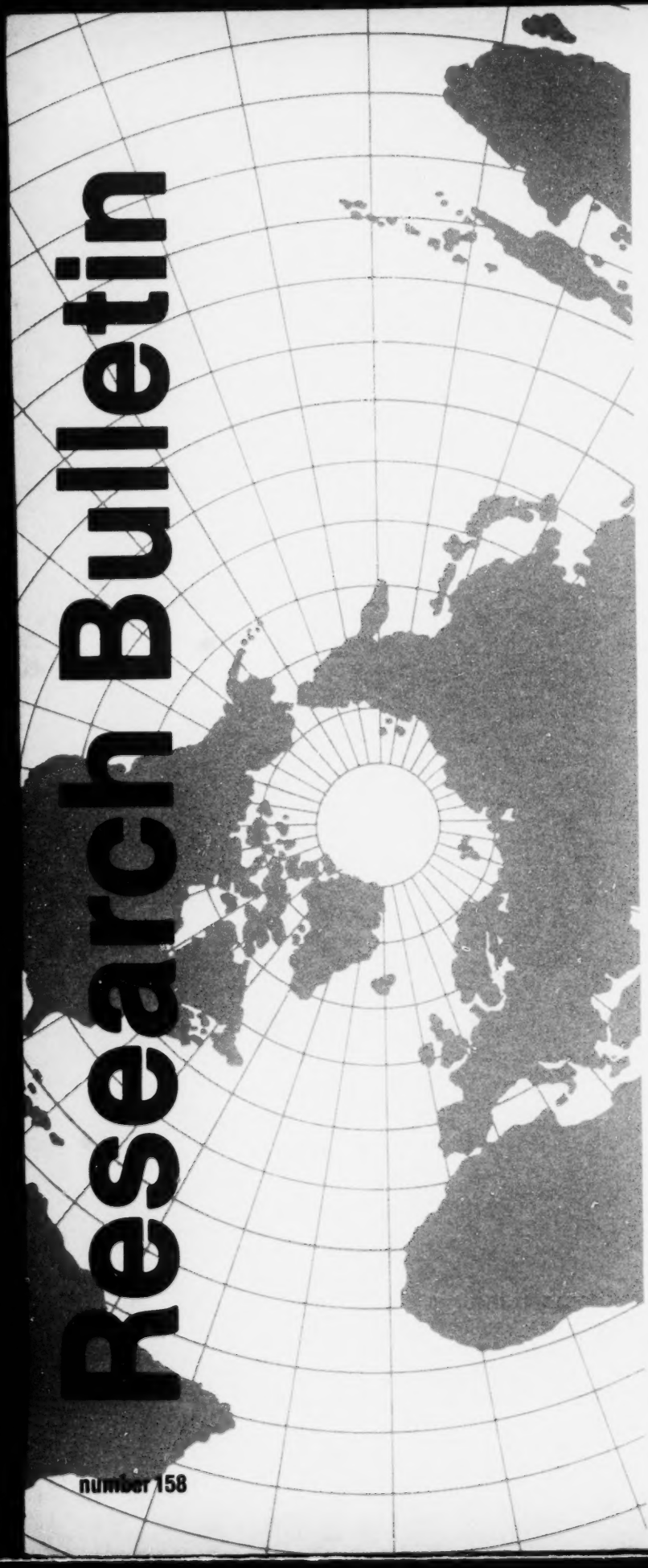

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The Dollar and U.S. Exports

Some Q's and A's

By John Hein

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IN A PIECE on the United States economy and U.S. economic policy, Robert Heilbroner of the New School for Social Research noted in *The New Yorker* last Summer that most Americans, "economists included," had long lived with the comfortable feeling that the United States could conduct its economic affairs without paying much heed to events in the rest of the world. However, that feeling is now ". . .rapidly dissipating, not merely as a consequence of the growth of the supranational realm of finance, but because of equally far-reaching changes in trade and production."

Indeed, over the past few years the influence of the outside world and of international transactions on the United States economy was brought home with a vengeance as declining exports and rising imports led to increasing unemployment in export and import-competing industries—and to mounting pleas for protection. The most common, and on the surface the most persuasive, explanation for the deteriorating United States trade performance has been the strength or "overvaluation" of the dollar relative to other major currencies.

Thus, from *The Washington Post* in the Spring of 1983: "Most of this country's current trade troubles. . .are the result of an overpriced dollar, lifted by high interest rates." Fred Bergsten of the Washington-based Institute for International Economics similarly noted last Summer that the main factor behind the large U.S. trade deficit was "the massive overvaluation of the dollar in the exchange markets." And The Conference Board's own chief economist, A.T. Sommers, sees a strong connection running "from the high budget deficit, to the high real interest rates, to the high valuation of the dollar, to the high trade deficit."

The facts themselves are undisputed. The dollar, which had been falling more or less steadily throughout 1978 and 1979, began to strengthen in the wake of the 1980 Presidential election. Between the end of 1980 and the end of 1983, it rose by 28.3 percent on a "trade-weighted" basis against the currencies of 15 other major countries. If adjustment is made for inflation differentials between the United States and those countries, the dollar rose by 25.9 percent over the same period. Against major individual currencies, such as the West German mark or the French franc, the appreciation was, of course, considerably greater.

At the same time, United States merchandise exports declined from $233.7 billion in 1981 to $200.5 billion last year, a 15 percent drop. (Total world exports declined by only 11 percent over the same period.) U.S. merchandise imports fell slightly from $260.9 billion in 1981 to $258.0 billion in 1983 (in the year between, they had receded to some $244 billion). As a result, the United States trade deficit grew from $27.3 billion to $57.6 billion over the two-year period. If imports are valued on the so-called c.i.f. basis (see box on page 4), the deficit jumped from $39.7 billion to the mammoth $69.4 billion prominently featured in the press.

Yet, it would be an oversimplification to make a straightforward connection between the strengthening of the dollar and the worsening of the United States trade account. First, the relationship between changes in exchange rates and changes in trade flows reflects a variety of decisions by both domestic and foreign producers and consumers and cannot be generalized. Second, the decline in United States exports in 1982 and 1983 can also be traced to factors other than the strong dollar—the lingering recession abroad, the decline in OPEC revenues, and, above all, the financial squeeze on many heavily indebted developing countries.

These strands cannot all be sorted out neatly; there are some intricate cross-connections and feedbacks that defy simple analysis. This brief report merely attempts to separate some of the factors mentioned and to clear up some of the general confusion. It does not discuss the reasons for the strength of the dollar, United States interest rates, or the budget deficit. Instead, it asks some basic questions—how do exchange rates affect trade? how much does the United States economy depend on exports? how has third-world debt affected those exports? and so on—and, hopefully, provides some simple and intelligible answers.

How Do Exchange-Rate Changes Influence Trade?

Exchange-rate changes influence a country's exports and imports—and hence its trade balance—in several important ways. The most direct of these is the pricing response of exporters and importers, which leads to changes in export and import prices and thereby to likely changes in the volume of exports and imports. A second, less direct, in-

VALUING UNITED STATES IMPORTS

Beginning in January, 1974, the Bureau of the Census began publishing two sets of data for United States imports (and hence for the United States trade balance). In addition to the so-called f.a.s. or customs value (representing "the transaction value of imports at the foreign port of exportation"), the data also show the so-called c.i.f. value (which includes "all freight, insurance, and other charges. . .incurred in bringing the merchandise from the country of exportation and placing it alongside the carrier at the first port of entry in the United States").

Some members of Congress had long argued for the second method of compilation—which is used by most other countries—as providing "more meaningful trade statistics for use in developing legislation and assessing our trade position." At the time the changeover was announced, the chairman of the United States Tariff Commission noted that the new data would be "of great help in analyzing the competitive position of the United States in relation to imports and in comparing on a common base the trade of the United States in relation with that of other countries."

The extent to which United States trade statistics have become more comparable with those of our major trading partners is questionable, however—largely because of the difference in absolute magnitudes. Thus, whether United States imports for 1982 are given as $243.9 billion (f.a.s.) or as $254.9 billion (c.i.f.) adds little refinement to a comparison with that year's imports (c.i.f.) of West Germany ($15.4 billion), Japan ($131. 5 billion), or the United Kingdom ($99.6 billion).

There is even some danger in looking only at the c.i.f. figures. To the extent that freight and insurance services connected with United States imports are supplied by U.S. firms, they do not represent international transactions and, hence, do not generate "outflows" of dollars or additional accumulations of dollars to foreign owners. In other words, measuring imports on a c.i.f. basis is tantamount to implying that the United States provides none of the associated services.

Yet, the monthly trade data that are seized upon so eagerly by the media are on a c.i.f. basis; the corresponding f.a.s. data are released only 48 hours later and generally are not reported by the press. The published United States trade deficit vis-á-vis the rest of the world thus tends to be overstated each month, and the difference between the two sets of data on an annual basis becomes considerable (see tabulation). The assertion that the growth in the trade deficit will eventually have to weaken the dollar is, therefore, based on figures that do not entirely represent dollars going to foreigners. In addition, that allegation—which says that trade deficits cannot continue at present levels and that export earnings are needed to pay our import bill—is a myth. It ignores not only the role of service receipts (particularly the income on United States direct foreign investment), but also the fact that exchange rates reflect not only merchandise and services trade but financial flows as well.

United States Trade Balance ($ billion)

	f.a.s.	c.i.f.
1974	— 4.5	—12.8
1975	+ 9.1	+ 1.8
1976	— 8.3	—17.3
1977	—26.5	—36.4
1978	—28.5	—39.6
1979	—24.6	—37.2
1980	—24.2	—36.4
1981	—27.3	—39.7
1982	—31.8	—42.7
1983	—57.6	—69.4

fluence is on domestic prices, since exchange-rate changes lead to changes in the cost of imported materials and in the prices of import-competing goods. In turn, such domestic price adjustments eventually reflect back onto trade flows. As one author has written: "Exchange rate movements. . .bring about a chain of decisions by producers, consumers and investors on whether to purchase foreign or domestic goods and whether to invest at home or abroad. Beyond that, however, no hard-and-fast rules can be laid down about these decisions."[1]

In very general terms, there are an infinite number of possibilities. What happens to exports when a country's currency falls or depreciates? Domestic producers might keep their prices unchanged, which would translate into lower foreign-currency prices for their goods and tend to stimulate export sales. Or they might raise their domestic prices and leave foreign-currency prices unchanged—which would yield them greater profits, but would not increase export sales.

What happens to imports when a currency depreciates? A relatively small country faces a given level of world prices for most of what it buys abroad; prices of those goods would rise (in local currency) and consumers probably would reduce their purchases. By how much, would depend on their responsiveness—the so-called elasticity—to price changes. But if importers and consumers should decide that the exchange-rate decline was likely to continue, they might well increase their purchases of foreign goods (to beat further price rises) and imports would actually increase.

The impact of exchange-rate changes on the overall economy also depends on the state of that economy, as well as on official economic policies. Thus when domestic output and employment are below their potential, a decline in a country's currency may well stimulate increased pro-

[1]Roger M. Kubarych, *Foreign Exchange Markets in the United States*. Federal Reserve Bank of New York, 1978, p. 46.

duction in export and import-competing industries. But if the economy is near or at its full potential, or if the government is applying stimulative fiscal and monetary policies, then a falling exchange rate would merely add to domestic inflationary pressures.

The effects of an appreciating or strengthening currency, such as the U.S. dollar over the past few years, are similarly complex and hard to generalize. They can be analyzed in terms of their "pass-through"—that is, the extent to which a higher exchange rate affects export and import prices. For example, if the prices charged by foreign exporters to their United States customers are set in terms of foreign currency, these prices would fall in dollar terms—potentially, by the full amount of the dollar appreciation. In that case, the appreciation would be passed through fully, as appears to have occurred for a number of foreign products. A French producer of crystal was able to increase its United States sales by 46 percent in 1983, and the company's export director was quoted by *The Wall Street Journal* as saying: "The exchange rate allowed us to keep [local-currency] prices stable over twelve months, which is essential when you're selling through catalogs."

On the other hand, if foreign suppliers' prices are set in dollar terms, those prices would remain unchanged and there would be no pass-through. However, keeping its dollar prices stable reportedly enabled Jaguar, the British car maker, to sell 50 percent more cars in the United States last year than in 1982—and increase profit margins at the same time. Alternatively, foreign exporters would stand to gain even if they raised their foreign-currency prices or reduced their dollar prices, as long as such a change was smaller than the appreciation of the dollar.

In practice, however, as a student of the phenomenon wrote recently; ". . .a mixture of these examples takes place. That is, the prices of some imports are essentially fixed in dollar terms, the dollar prices of other imports change by the full amount of any exchange-rate change, and the dollar prices of still others reflect a partial pass-through of any exchange-rate change."[2] He also pointed out that such a pass-through tended to be higher in industries in which sales and market-share objectives are particularly important. By contrast, a lower pass-through could normally be assumed to occur in sectors in which the United States has a major market share, either as producer or consumer, or which produce fairly homogeneous commodities, such as agricultural products or major raw materials. Prices for the latter are generally quoted in dollars and are determined on world markets.

Still, as mentioned, no hard-and-fast rules can be laid down. Thus, in a recent study of the impact of the strong dollar on trade in six major products the United States International Trade Commission concluded "that the assumption that trade in primary homogeneous products is generally more sensitive to exchange-rate changes than is trade in heterogeneous products is not necessarily correct."[3] The Commission's analysis indicated that trade in such primary products as magnesium and polyester staple fiber might not be more exchange-rate sensitive than trade in intermediate goods, such as denim and brass strip, or in such consumer goods as bicycles and pianos.

Since an appreciation of the dollar translates into a greater amount of foreign currency per dollar than before, on the export side the crucial element is the extent to which such an exchange-rate change is not passed through to the foreign buyer. In order to maintain sales and market shares abroad, United States exporters would have to counter a dollar appreciation by reducing their dollar quotations in markets that are especially price-sensitive, or in which other foreign suppliers offer strong competition. This would be the case for a wide range of manufactured products. As an alternative to reducing its dollar prices, one major United States manufacturing company reportedly was increasingly quoting prices on products from its foreign affiliates to its overseas customers. (A spokesman stated that this strategy also was motivated, in part, by the greater availability of export financing abroad.)

On the other hand, where foreign demand is less likely to respond to price changes or where other suppliers are unlikely to have an edge, United States exporters might keep their dollar prices unchanged without losing a substantial amount of sales. In that case, the pass-through would be complete.

How Much Does the U.S. Economy Depend on Exports?

The growing economic interdependence among countries has brought with it a significant increase in the "openness" of the United States economy and, therefore, in its sensitivity to influences emanating from abroad. The ratio of U.S. merchandise trade (exports plus imports) to gross national product doubled between 1970 and 1980—a far larger percentage increase than for any other industrial country, although it started very small. The ratio of foreign trade (broadly defined) to GNP—that is, including both goods and services—rose from 10 to 25 percent over the same period. Over most of the post-World War II period, world trade generally has tended to increase faster than economic activity, so that it is not unreasonable to assume that United States merchandise exports and imports combined will come to equal between 25 and 30 percent of GNP by the end of the current decade.

These comparisons are, of course, somewhat artificial since much of what goes into gross national product can-

[2]Robert A. Feldman, "Dollar Appreciation, Foreign Trade, and the U.S. Economy," Federal Reserve Bank of New York, *Quarterly Review*, Summer, 1982, p. 4.

[3]United States International Trade Commission, *The Effect of Changes in the Value of the U.S. Dollar on Trade in Selected Commodities*. Washington, D.C.: USITC Publication 1423, September, 1983, pp. 2-3.

Table 1: Exports and the U.S. Economy

Year	Total GNP	Net exports	"Domestic" GNP	Change in Total GNP	Change in "Domestic" GNP
	(Billions of 1972 dollars)			(Percent)	
1980	1,475.0	50.3	1,424.7		
1981	1,513.8	43.0	1,470.8	+2.6	+3.2
1982	1,485.4	28.9	1,456.5	—1.9	—1.0
1983	1,535.1	12.6	1,522.5	+3.3	+4.5

Source: U.S. Department of Commerce

not be exported (or, in the economist's language, is "nontradable")—for instance, haircuts and residential construction. A much more meaningful indicator is, therefore, the ratio of merchandise exports to production of all goods—which reached a respectable 25 percent in 1982.

The actual influence of exports, and hence of the export decline in 1982 and 1983, on overall economic activity is somewhat more complex. The international position of the United States enters into the national accounts through the category of "net exports of goods and services," that is, the difference between total exports and imports of goods and services. Over the years, the contribution of that category to GNP has fluctuated considerably. In the past three years, the decline in net exports of goods and services had a sharply negative impact on total GNP. (see Table 1.) In 1981 and 1983, it lowered the domestic component of the real GNP increase by 0.6 percent and 1.2 percent, respectively. In 1982, the fall in net exports contributed 0.9 percent to the overall GNP decline.[4] Or, as Federal Reserve Chairman Volcker told the House Banking Committee in February: "It is the exporter, and those competing directly with imports, that have not shared at all proportionately in the recovery."

The relation between exports and employment has been well documented. A 1982 Commerce Department survey, *Origin of Exports of Manufactured Products* (drawn from the Department's *Annual Survey of Manufactures for 1980),* traced the contribution made by exports to both manufacturing activity (shipments) and employment by major industries and by states. According to the report, in 1980 there were 4.8 million jobs in the United States *related* to the export of manufactured goods. These represented 5 percent of total civilian employment and 6 percent of employment in the private sector.

Of the 4.8 million jobs, 2.8 million were in manufacturing plants per se, and another 1.9 million in nonmanufacturing establishments supplying materials and services to the ultimate manufacturers. The 2.8 million, in turn, included 1.5 million jobs producing manufactured goods for direct export and 1.3 million jobs in other manufacturing plants that contributed parts and components.

The 1.9 million workers in nonmanufacturing activities that support manufactures exports included jobs in trade, business, transportation, communications, utilities, agriculture, mining and other industries (see box). Wholesale and retail trade accounted for more than three-quarters of a million jobs in support of manufactures exports, and business services for another one-third of a million.

For the manufacturing sector and its supporting industries combined, the Department of Commerce found that exports accounted for 14.1 percent of total shipments and 14.7 percent of total employment. Of the 20 major industry groups classified in manufacturing, nonelectric machinery recorded the largest number of export-related jobs (526,200), with electric and electronic equipment ranking second (343,300). The industry group with the largest percentage of employment associated with exports was tobacco products (27.2 percent).

On a geographic basis, the Commerce Department estimates found the largest number of export-related jobs in California (518,000), with New York ranking second (388,100). As a share of total civilian employment, Rhode Island and Connecticut (with 7.5 and 7.2 percent, respectively) had the highest proportion of jobs related to manufactures exports.

In an even more recent study, *Domestic Employment Generated by United States Exports,* the Commerce Department found that United States exports in 1982 generated a total 4.9 million jobs in *all* sectors of the economy, as against 6.2 million in 1980. This study found that, in 1982, each $1 billion of exports was responsible for an average of 25,200 jobs. A similar calculation for 1980 would yield an average of 28,100 jobs per $1 billion of exports. Not only were exports lower in 1982, but both inflation and rising productivity had reduced the actual number of jobs required to support the same amount of exports that year. The 1982 exports-jobs ratio can be applied provisionally to 1983, which was characterized by a low inflation rate and no significant gain in productivity. Last year's $11.7 billion export decline may then be estimated to have caused the loss of approximately 295,000 jobs.[5]

The Commerce Department's more recent study also found that changes in United States export-related jobs

[4]In the fourth quarter of 1983 alone, an $8.6 billion drop in net exports (annual rate) reduced the economy's growth rate to 5.0 percent, from a potential 7.2 percent.

[5]Yet, in 1983 the overall U.S. unemployment rate dropped 2.5 percentage points, the sharpest one-year decline in 30 years, and civilian employment reached a record 102 million. Moreover, rising imports also create jobs. Although the total cannot be easily verified, the imported-car industry alone accounts for some 194,000 jobs.

EXPORT-SUPPORTING ACTIVITIES IN THE NONMANUFACTURING SECTOR

In addition to including employment in manufacturing establishments that supply materials and parts for the production of manufactured exports, the indirect estimates in this report include employees in nonmanufacturing, such as farms and mines that provide materials inputs to manufacturing, plus various types of services required to nonmanufacturing industries in producing the manufactured goods to be exported, such as electricity, repair services, business services, transportation, utilities, etc.

Also taken into account. . .are employees associated with inputs to the business supplying these goods and services to the final manufacturers of the exported goods, and so on. Thus, the indirect estimates include the employment associated with steel and electricity entering the production of an automobile for export, the coal used by the steel mill and electric utility, the transportation of the coal, the fuel and repair shops, etc. The data also include estimates of employment associated with transporting the manufactured goods from "plant to port" and the employment of exporting establishments that purchase and resell the goods to foreigners or arrange their sales abroad. It should be emphasized again that the employment estimates relate only to the export of manufactured goods and exclude employment related to the export of other goods and services. They do not, therefore, measure the full employment effect of all U.S. exports.

U.S. Department of Commerce, *Origin of Exports of Manufactured Products*, January 1982.

have a greater-than-proportionate effect on overall employment in the United States. Thus, the increase in export-related employment in manufacturing between 1977 and 1980 equaled 80 percent of the rise in total manufacturing employment and 30 percent of the rise in total employment in the private sector. Conversely, the 20 percent drop in export-related employment between 1980 and 1982 accounted for 40 percent of the increase in total U.S. unemployment between the two years.

Export-related employment, not surprisingly, is most important in manufacturing. In 1980, 49 percent of such employment was in manufacturing industries, 14 percent in the nonmanufacturing sector, and 37 percent in the services industries. Even at the reduced 1982 level, exports continued to contribute powerfully to total employment levels: They generated one out of eight jobs in manufacturing, one out of six in nonmanufacturing, and one out of thirty in services. For the private sector as a whole, they accounted for 6 percent of total United States employment.

How Have U.S. Exports Compared to World Trade?

The depressed state of the world economy certainly has tended to contribute to the poor United States trade performance of the past few years. World trade did, indeed, decline in both 1981 and 1982. But, as has also been said, some of our major competitors, such as Germany and Canada, did better in 1982 than in the previous year, although they faced the same economic conditions worldwide as did the United States. And the United States recorded an almost $40 billion deficit in trade in manufactures last year, while West Germany had an estimated $75 billion surplus on such trade and Japan one of $110 billion.

The data show clearly that the United States share of world exports has declined since 1970, while the shares of our major competitors have remained fairly constant or have risen. For manufacturing exports alone, the United States share has also fallen noticeably, while other major exporters have either maintained or increased their shares.

However, these data are based on dollar values and include the exports of other countries converted into dollars from local currencies. Thus, as the exports of countries whose currencies appreciated against the dollar in the late 1970's are converted, the conversion process itself boosts the dollar value of their exports. This, in turn, increases these countries' market shares and reduces the U.S. share without, as Fred Bergsten pointed out to the National Foreign Trade Council in 1980, "their exporting a single extra Volkswagen or Toyota." The commonly used statistical series, based on dollar values, can, therefore, give a somewhat misleading impression of changes in the international competitive position of the major countries.

A different picture emerges when the market share data are computed in real terms—that is, in volume terms or by dividing nominal export values by an export price index. On the basis of volume data, the U.S. world market share rose over the 1970's. In fact, the very strong growth in export volume in 1978 and 1979 as a result of the weak dollar resulted in a market share that was a full percentage point higher in 1979 than at the low reached in 1972.

The converse is, of course, true for the more recent years when the dollar strengthened, so that foreign countries' exports (in domestic currencies) translate into fewer dollars. Thus, what in nominal terms appears to be a slight increase in U.S. market shares in the 1980-1982 period actually (and not surprisingly) shows up as a declining share in real terms.

Table 2 examines the decline in the U.S. share of world trade from a slightly different view that takes into account the relatively slower growth of the U.S. economy. The upper half of the table gives U.S. exports, both overall and of manufactures, as a share of the exports of the 15 major industrial countries. This conclusively indicates the

Table 2: Export Market Shares

	1970	1975	1980	1981	1982	1983
			(Percent)			
Shares of industrial countries' exports						
						(Jan.-Sept.)
United States	19.6%	19.0	17.9	19.2	18.5	17.8
Germany	15.5	15.9	15.6	14.4	15.4	15.0
United Kingdom	8.9	7.8	8.9	8.4	8.4	7.7
Canada	7.4	6.0	5.5	5.9	6.2	6.6
Japan	8.7	9.8	10.6	12.4	12.0	12.7
Shares of industrial countries' exports of manufactures						
						(Jan.-June)
United States	17.4%	16.3	15.5	16.9	16.2	15.6
Germany	18.1	18.3	17.9	16.5	17.6	17.5
United Kingdom	9.7	8.4	9.2	7.6	7.6	7.0
Canada	5.7	3.8	3.7	4.2	3.7	4.4
Japan	10.7	12.2	13.3	16.0	15.5	15.7
United States share of industrial countries' GNP	50.2%	40.8%	34.8%	41.7%	41.1%	
			(1970 = 100)			
U.S. export share	100.0	96.9	91.3	97.9	94.4	90.8
U.S. share of manufactures exports	100.0	93.7	89.1	97.1	93.1	89.7
U.S. share of industrial countries' GNP	100.0	81.3	69.3	83.1	81.9	
U.S. export share adjusted for GNP share	100.0	119.2	131.7	117.8	115.3	
U.S. share of manufactures exports adjusted for GNP share	100.0	115.3	128.6	116.8	113.7	

Sources: Council of Economic Advisers; International Monetary Fund; United Nations; The Conference Board

noticeable decline in the 1970's (and the slight rebound in the early 1980's). However, during the 1970's the other major industrial countries had, on average, higher economic growth rates than the United States. Thus, as the table also indicates, the U.S. share of the GNP of the industrial countries as a group fell from about 50 percent in 1970 to 35 percent in 1980.

These data can be interpreted to mean, paradoxically, that more rapid economic growth abroad may actually have contributed to the decline in U.S. export market shares. In fact, when the export data are adjusted (lower half of table) to allow for the declining United States share of the combined GNP of the major industrial countries, the United States market share—both for total exports and, to a lesser degree, for exports of manufactures—was (and has remained) above the 1970 level. This could suggest that the relatively slower growth of the U.S. economy relative to the rest of the industrial world resulted in a declining market share for United States exports. In other words, a more slowly growing economy tended to generate slower export growth.

How Has Third-World Debt Affected U.S. Exports?

The most noticeable effect of the developing countries' debt crisis on United States exports can be seen in the case of Latin America. That area—which normally constitutes a market for between 15 and 18 percent of United States goods—at the end of 1983 accounted for 37 percent of the external debt of all nonoil-developing countries.

The effects of the Latin American debt crisis have been felt sharply by U.S. exporters. Between 1978 and 1981, United States exports to Latin America had grown more than 50 percent faster than U.S. exports to the rest of the world—so that the declines in the past two years had a pronounced impact on overall U.S. export performance. The nearly $9 billion drop in United States sales to Latin America in 1982 accounted for over 40 percent of the total decline in United States exports that year. The 1983 drop of $7.4 billion was almost two-thirds of the total export decline of $11.7 billion. In both years, moreover, Latin America's imports from the United States fell faster than the decline in Latin American imports from the world as a whole.

Mexico, which is this country's third largest trading partner and accounts for nearly half of our exports to Latin America, was among the first of the major Latin American countries to curtail its imports because of financial difficulties. While United States exports to Argentina also fell sharply in 1982, the full impact of the economic contraction in Brazil, Venezuela and most of the other countries made itself felt only last year.

The decline in exports to Latin America since 1981 has affected every major category of United States exports (Table 3), but has been particularly pronounced in machinery, transport equipment, and in the general category of "other manufactured goods." Basic iron and steel product exports were almost cut in half in 1982 and suffered further inroads last year. Thus, several major industries that were already hard hit by the recession in the United States also suffered some of the sharpest declines in exports to Latin America.

While high-technology products were not hit as hard by retrenchment measures in Latin America at first, by the first half of 1983 exports of scientific and business machinery and of computers were also down between 20 and 40 percent from a year earlier. Even exports of agricultural products—long the mainstay of United States sales abroad—have been affected (although here good crops in Mexico and Brazil also played a part). But many somewhat unusual items also have become casualties of economic austerity measures. As *The Economist* reported last September: "Imported American turkey is off the menu in Quito, Santiago and Bogota; salmon is scarce in Mexico City and Lima; Hawaiian pineapples are absent from fruit-stalls in Buenos Aires. . .Exports of communion wafers from the United States to Latin America [also] have stopped."[*]

Using recent Commerce Department estimates of the relation between United States exports and employment, the $9 billion loss in exports to Latin America in 1982 may have caused the loss of approximately 225,000 United States jobs in that year. More than three-quarters of this loss is estimated to have taken place in the machinery, transport equipment, and other manufactured goods sectors—where unemployment in 1982 already was higher than the average for all sectors. The further export decline of $7.4 billion last year thus may have led to a further loss of about 185,000 jobs.

Table 3: United States Exports to Latin America (billions of dollars)

	1981	*1982*	*1983*
Total	38.9	30.0	22.6
Mexico	17.8	11.8	9.1
Venezuela	5.4	5.2	2.8
Brazil	3.8	3.4	2.6
Argentina	2.2	1.3	0.9
Food and animals	4.7	2.8	3.6
Chemicals	4.5	3.7	3.3
Machinery	12.3	9.7	6.1
Transport equipment	5.4	3.3	2.0
Other manufactures	7.5	5.4	1.6
Business machinery	1.9	1.6	0.7
Iron and steel products	1.1	0.6	0.3

Source: U.S. Department of Commerce

How Have Declining Oil Revenues Affected U.S. Exports?

Declining oil revenues had a dramatic effect on the revenues of OPEC (as well as of non-OPEC) producers last year. With oil prices down by $5 per barrel on average and OPEC production almost 1 million barrels-per-day less than in 1982, the group's oil revenues were estimated to have been about $50 billion lower. This, in turn, has led to a remarkable deterioration of OPEC's current account—to deficits of $8 billion and $30 billion in 1982 and 1983, respectively—and has forced several member countries to curtail their imports.

For the time being, sizable holdings of financial reserves, reflecting the earlier surplus years, did provide a cushion that permitted several OPEC countries to avoid financial retrenchment. Nevertheless, some, such as Venezuela, began to face serious problems, while others, such as Indonesia and Nigeria, had to make substantial economic and financial cutbacks. Even Saudi Arabia, with an estimated $160 billion in reserves in early 1983, moved into deficit during the year.

Overall, the OPEC countries were able to maintain their 1982 imports at the previous year's level, although reducing their imports from the United States slightly. During the first nine months of last year, however, the group's purchases from this country fell three times as fast as their imports from the world as a whole (see Table 4).

Table 4: OPEC Imports

					Change	
	1980	*1981*	*1982*	*1983 (Jan.-Sept.)*	*1982/1981*	*Jan.-Sept. 1983/1982*
	(billions of $)				*(Percent)*	
Total	131.4	153.5	154.1	106.1	0.4%	— 7.7%
From United States	17.8	21.5	10.7	13.0	—3.7	—24.8

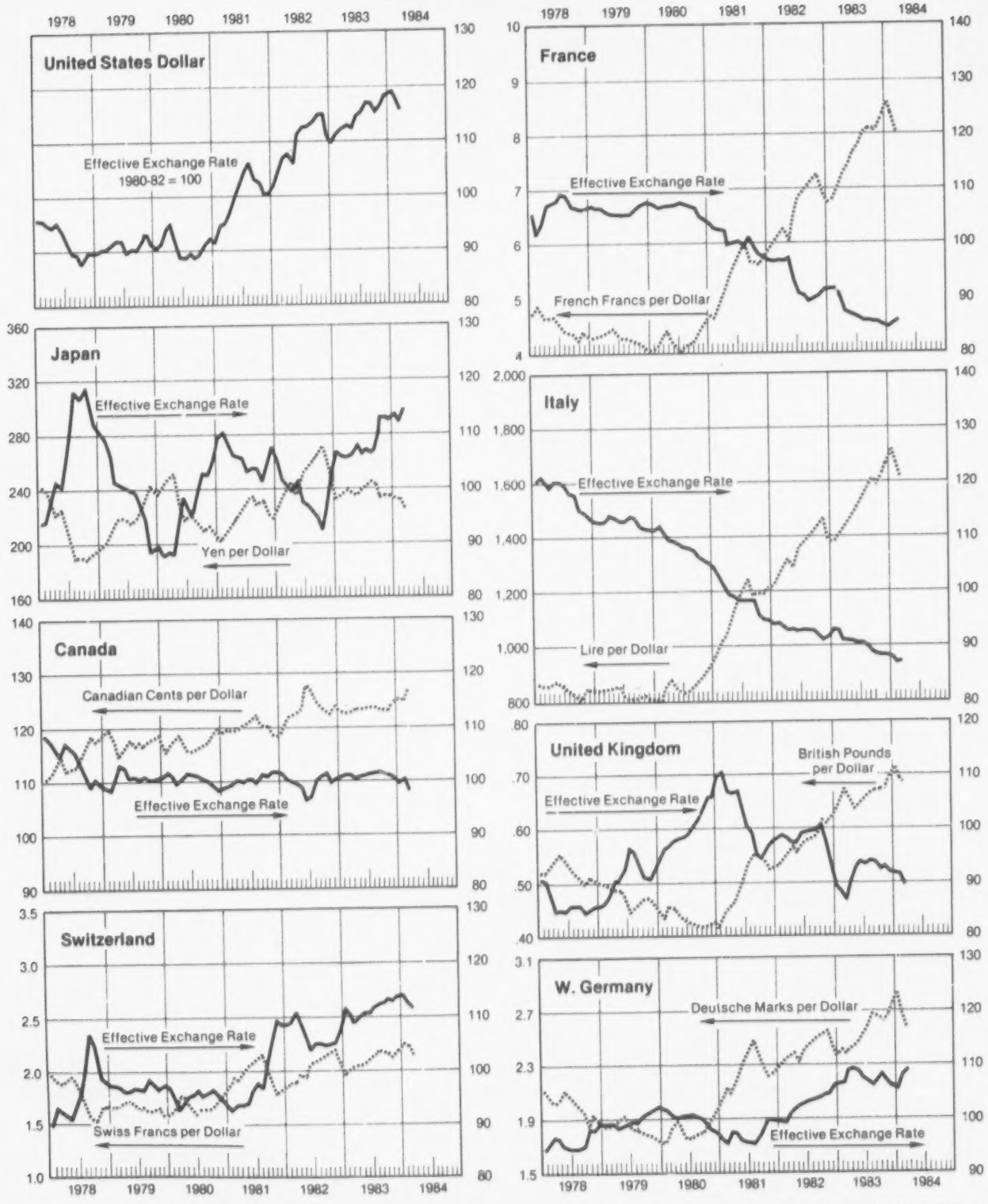
Sources: International Monetary Fund, U.S. Department of Commerce

[*] "'Bring Your Own,'" *The Economist*, September 10, 1983, p. 68.

Chart 1

Foreign Exchange Rates

Indexes: 1980-82 = 100



Note: Nominal Effective Exchange Rates: Index numbers 1980-82 = 100. Each index shows a currency's trade-weighted appreciation or depreciation measured against fifteen other major currencies using averages of daily noon spot exchange rates in New York and bilateral trade weights based on 1980 trade in manufactures.

Source: Morgan Guaranty Trust Co

How Have U.S. Exports to Major Industrial Countries Fared?

Over the last two to three years, the dollar has strengthened most against the currencies of some of the major industrial countries—such as the German mark, the yen, the pound, and the French franc (Chart 1). As was pointed out above, changes in exchange rates can—and do—have a mixed effect on actual merchandise trade. Some prices of traded goods may be fixed in dollar terms, some may change by the full amount of the rate change, and some may reflect only a partial "pass-through."

There is, in fact, very little direct correlation between percentage changes in the value of the dollar against specific currencies, on the one hand, and in the trade balance with those countries, on the other. For example, from 1981 to 1982 the dollar appreciated by 21 percent against the French franc, but the United States trade balance with France improved slightly. At the same time, a 7-percent appreciation of the dollar against the West German mark coincided with a considerable worsening of the U.S. trade balance with West Germany.

In addition, the recent analysis by the United States International Trade Commission notes "that exchange-rate movements cannot always be assumed to be the predominant factor which determines changes in trade flows with respect to any individual product."[1] Such a direct relationship is muddied by other factors, including domestic price changes, competition from substitute products, constraints on supply, limited access to markets, transactions between related parties, and changes in both product demand and consumer preferences. All these, the Commission suggests, can have equal, or even greater, impact on trade flows than the exchange rate itself.

Moreover, even when exchange-rate changes do affect trade flows they can be expected to do so with some lag. Some earlier studies, done in the 1970's, had indicated that these adjustment lags might be rather lengthy, with one analysis finding an average lag of one and three-quarter years (implying a total adjustment period of up to three-and-a-half years) and another finding total lags of up to five years. More recent work by a major New York investment firm has suggested an overall lag between rate changes and trade-flow changes of two-and-a-half years, with half of the effect occurring in fifteen months.

An additional factor bearing on United States trade at this juncture is the difference in timing of the recovery in the United States and in the other major industrial countries, with the latter group lagging behind. Thus, in mid-1983, the OECD saw the prospect for recovery "most solid for the United States," while Europe at that point remained "the most uncertain area," and a slow pickup to modest growth there could not yet "be said to be unequivocally under way." Prospects looked more firm by the year-end, according to the OECD, with recovery "well under way in the United States" and Japan "looking more buoyant." For Europe, however, the recovery still was likely to be "more modest and perhaps also more fragile."

This difference is borne out strongly by the leading indicators, computed by the Center for International Business Cycle Research at Columbia University. In the twelve months through October 1983, the leading indicator for the United States had advanced by eight points, or eight percent, while for four major European countries—France, Germany, Italy and the United Kingdom—the combined advance had been only one point, or one percent.

These cyclical differences, combined with the fall in European currencies against the dollar, have more than wiped out the traditional (and substantial) U.S. trade surplus with Europe. At the height of the last export boom, in 1980, the U.S. surplus with the European Community ($17.2 billion) more than offset our trade deficit with Japan ($9.9 billion). But the United States is now running substantial deficits with all major European countries, and was barely in balance on its 1983 trade with the Community as a whole.

Some simple calculations by The Conference Board indicate that for the major industrial countries there has, indeed, been some fairly close correspondence between the strengthening of the dollar and United States exports to those countries. Chart 2 depicts quarterly changes since the beginning of 1981, with 1980 taken as the base year.

The upper left-hand panel plots the behavior of total United States nonagricultural exports against changes in the value of the dollar. The solid line represents the *ratio* of nonagricultural exports to the combined coincident indicators for six major foreign countries—Canada, France, Germany, Italy, the United Kingdom, and Japan. These indicators, which also are computed by the Center for International Business Cycle Research, are composites of such variables as real GNP, industrial production, employment and retail sales, and generally define where an economy "is at." Adjusting U.S. exports by changes in economic activity in these major countries takes account, in a sense, of variations in the market share of United States exports. (For example, if economic activity abroad declined while United States exports were unchanged, one might say that the United States market share had increased, and vice versa.) The broken line tracks the trade-weighted value of the dollar in terms of 15 major currencies.

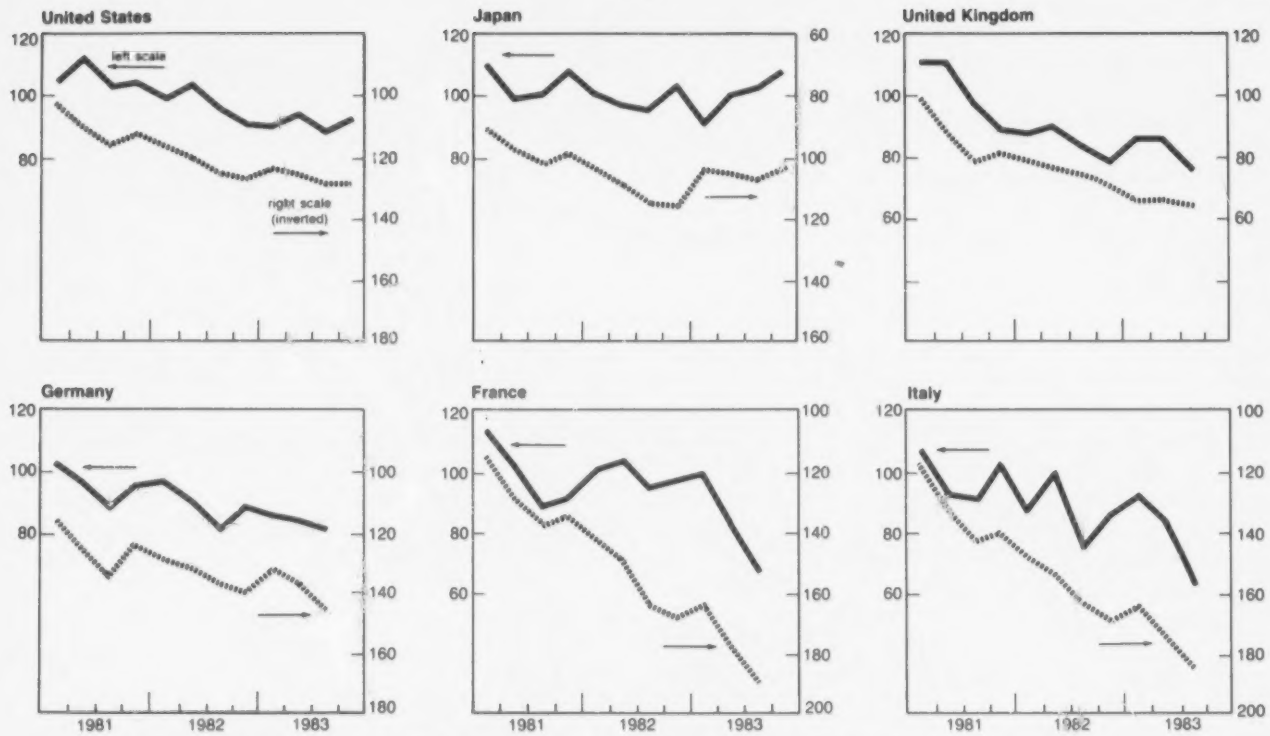
The five country panels are similarly arranged to show, the *ratio* of total United States exports to that country's industrial production (solid line), and the country's exchange rate against the dollar (broken line).

[1] U.S. International Trade Commission, 1983, p. 2.

Chart 2

U.S. Exports and the Dollar

1980 = 100



U.S. panel: ——— Ratio of nonagricultural exports to combined coincident indicator for Canada, France, Germany, Italy, Japan and United Kingdom
•••••••• Trade-weighted value of dollar against 15 major currencies

Country panels: ——— Ratio of U.S. exports (to country) to country's industrial production
•••••• Country's exchange rate against dollar

Sources: Center for International Business Cycle Research; International Monetary Fund; Morgan Guaranty Trust Company; U.S. Department of Commerce; The Conference Board

How Will Exports Fare in 1984?

In attempting to project the course of United States exports in 1984, a number of commentators have pointed to what they consider the inevitable weakening of the dollar this year and thus to a turnaround, or at least an improvement, in the United States trade accounts. But as the preceding discussion has shown, the decline in U.S. exports over the last two years or so is only partly related to the strength of the dollar. Factors other than the dollar that have affected our exports adversely are likely to continue exerting their influence, at least for the remainder of 1984.

First and foremost, the cyclical divergence between the United States and Western Europe is likely to persist. As the Conference Board's *International Economic Scoreboard* noted at the beginning of the year: "In Europe. . .the recovery is developing more gradually than in North America and Japan. The combined leading index for France, West Germany, Italy and the United Kingdom was rising at an annual rate of 6 percent in October [1983] while the leading index covering the United States, Canada and Japan was climbing at a 15 percent rate." In February, the *Scoreboard* noted that "all countries except Italy seem to have turned the corner."

This cyclical divergence has a further and longer-range implication. According to some recent research, for each 1 percent increase in United States output, U.S. imports of manufactures tend to increase by 3.1 percent. By contrast, for each 1 percent increase in output in the rest of the world, U.S. exports of manufactures tend to increase by only 1.3 percent. Thus, even if United States manufactures exports and imports initially were equal in value, to keep the balance from deteriorating either the U.S. growth rate would have to be about one-third of that in the rest of the world, or the relative price of United States goods would have to decline substantially.[1]

Second, while the debt situation of the developing countries, most importantly those in Latin America, currently is under control, it is not going to be resolved in a period as short as a year. The borrowing requirements of the

[1]Robert Z. Lawrence, "U.S. International Competitiveness." Joint Economic Committee of the Congress, *U.S. International Economic Policy in the 1980's*. 97 Cong., 2nd sess. Government Printing Office, February, 1982, p. 74.

LDC's will remain quite high for some time to come, necessitating substantial financial flows from banks and international financial institutions as well as continued retrenchment at home. Only strong and continued growth in the industrial world will give these countries the chance to resolve their debt problems satisfactorily. Nor does it appear likely that oil prices will shoot up once more to levels that would permit the OPEC countries to become substantial buyers of United States products. (This would hold true even if oil supplies from the Persian Gulf were temporarily disrupted.)

As to the dollar itself, most analysts agreed early this year that any weakening in 1978 would be slight—amounting to no more than between 10 and 15 percent on a trade-weighted basis (i.e., against a basket of 15 major currencies). But it needs to be stressed that close to 40 percent of U.S. exports go to four markets—Canada, Japan, Mexico and the United Kingdom. The currencies of those four countries are unlikely to strengthen against the dollar by as much as 10 or 15 percent.

At the Conference Board's annual Financial Conference in February, one speaker asked: "Can any company export today?" He went on: "The answer for most United States firms is pretty clear. . .only with difficulty. Yet, final results for 1983 also confirm that many are still exporting, even as others suffer collapse in orders and shipments." He then outlined other elements of the "marketing mix" that he saw as becoming increasingly important in the face of a strong dollar: "A new or differentiated product; a more accommodative distribution system; or a better-targeted promotion. But each possible offset involves an upgrading of marketing budgets and more financial risk." It is clear, he concluded, "that few U.S. exporters can hope for any repeat of success stories of the 1970's variety without extraordinarily hard work."

That is not to say, of course, that in the longer run a marked decline in the dollar cannot improve United States international competitiveness again. Thus, during 1978-1980, when the dollar fell sharply, U.S. exports grew at double the rate of world trade generally, and actually recaptured the share of world exports of manufactures that had been lost earlier in that decade. That episode has also been interpreted by some as providing a powerful counterargument to the view that this country is being "deindustrialized" because its industries cannot compete internationally.

In terms of the overall economy, moreover, the 1978-1980 period saw a broad surge in "net exports," which, in turn, contributed to the strength of real GNP—just as that category fell dramatically in 1981-1983 and thereby affected overall economic activity. Thus, in the long run, one must attach considerable significance to changes in the value of the dollar and its influence on both the trade and national accounts.